

### **REMARKS**

This amendment is being filed in response to the Office Action dated May 8, 2006. In that office action, claims 22-39 were rejected under 35 USC §103(a) for being unpatentable over Nordlund in view of Malony, and claim 40 was separately rejected under 35 USC §103(a) for being unpatentable over Nordlund in view of Malony and in further view of Hayashi. Claims 22 and 31 are currently being amended.

#### **Claims 22-39 -**

Claims 22-39 stand rejected under 35 USC §103(a) as being unpatentable over Nordlund (US Patent No. 6,112,093) in view of Maloney (US Patent No. 6,288,676). In light of the amendments to independent claims 22 and 31, and at least for the reasons stated below, the Applicants respectfully traverse this rejection and request that these claims be allowed.

First, at a threshold level, neither of the cited references is directed to a method or a system for adjusting, controlling or otherwise manipulating the signal level of a signal sent by a mobile transceiver, as recited in amended claims 22 and 31. Turning first to the Nordlund reference, this patent is focused on the allocation of traffic channels to a dual-mode (digital and analog) mobile station. Although Nordlund discloses the use of a base station to measure the signal strength of a received signal, this measurement *has nothing to do with adjusting or controlling the signal level of a signal*, as called for in claims 22 and 31, and instead is used to determine whether the mobile station will be assigned an analog traffic channel or a digital traffic channel. Referring now to the Nordlund specification, it states,

Therein, at block 600, a decision is made to allocate a traffic channel to mobile station MS. Then, the received signal strength measured by the serving base station of the mobile station's transmitted signals on the control channel is compared with a predetermined threshold for digital call-setup at block 602, which threshold is referred to herein as "SS<sub>Call-setup</sub>". If the measured

signal strength exceeds  $SS_{\text{Call-setup}}$ , *then a digital traffic channel will be allocated to mobile station MS by base station 500 at block 604. Otherwise, if the measured signal strength is less than or equal to  $SS_{\text{Call-setup}}$ , an analog traffic channel will be allocated (if available) to mobile station MS by base station 500 at block 606.*<sup>1</sup> (Emphasis added.)

The Maloney patent is likewise focused on an apparatus and method that are wholly unrelated to the claimed subject matter; more specifically, Maloney is concerned with utilizing the measured characteristics of a radio signal along with “collateral information” (such as verbally asking a person if they are located on a road<sup>2</sup>) to locate a mobile transmitter station. Maloney describes a number of techniques and factors for determining the location of a mobile transmitter station, including determining the received signal power, however these factors are used in the location process and *are not used to adjust or control the signal level of a signal*, as called for in claims 22 and 31.

The relationship between signal strength (i.e., power) and range is supporting information that can be available in a database as collateral data representing signal propagation characteristics. A standard relation between strength and range is that the received signal strength or power is inversely proportional to the square of range.<sup>3</sup>

Second, while the Applicants agree with the Examiner that the Nordlund reference fails to teach sending a signal level instruction to the mobile transceiver in response to a measurement of a signal level, and adjusting the signal level of the mobile transceiver in response to that signal level instruction<sup>4</sup>, they respectfully traverse the contention that Maloney cures such a defect. The section of the Maloney patent referenced by the Examiner states that the signal modification is analogous to a handover process for transferring between cells in a cellular telephone network, but does not disclose or even suggest *sending a signal level instruction* to the mobile transceiver and adjusting the signal level *in response to the signal level instruction*, as set forth in claims 22 and 31.

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<sup>1</sup> US Patent No. 6,112,093; col. 6, lines 38-50

<sup>2</sup> US Patent No. 6,288,676; col. 6, lines 30-31

<sup>3</sup> See Id at col. 11, lines 15-20

<sup>4</sup> Office Action dated May 8, 2006; page 3

Third, there is no suggestion or motivation for combining the Nordlund and Maloney references in the manner suggested by the Examiner. As stated above in greater detail, the Nordlund patent is focused on *the allocation of traffic channels* for a dual-mode mobile station, while the Maloney reference is concerned with using radio signals *to locate mobile stations* within a particular cellular network. These objectives are plainly distinct from one another and do not provide any type of suggestion or motivation for making an appropriate prior art combination.

As for claims 24 and 33, the Applicants respectfully disagree with the Examiner's position that Maloney teaches the subject matter of those claims. In the last Office Action, the Examiner stated, "...it is obvious that the land-based station will adjust the *operating frequency* more than one time during the call." However, the Applicants respectfully point out that it is not the operating frequency that is being claimed, rather it is the second modem carrier signal level.

Therefore, for at least the foregoing reasons, the Applicants respectfully request that the Examiner reconsider this rejection and allow claims 22-39, as amended.

**Claim 40 -**

Claim 40 stands rejected under 35 USC §103(a) as being unpatentable over Nordlund in view of Maloney and in further view of Hayashi. In addition to the fact that Hayashi fails to cure the drawbacks of the prior art discussed above and that the Nordlund and Maloney references lack the requisite suggestion or motivation for a proper combination, there is no suggestion or motivation for combining Hayashi in the three-part manner currently suggested by the Examiner.

Thus, the Applicants respectfully request that the Examiner reconsider this rejection and allow claim 40.

**Conclusion –**

Therefore, in view of the foregoing, the Applicants respectfully submit that all of the pending claims are allowable over the prior art and requests that they be allowed. The Examiner is invited to telephone the undersigned if doing so would advance prosecution of this case.

The Commissioner is hereby authorized to charge Deposit Account No. 07-0960 for any required fees, or to credit that same deposit account with any overpayment associated with this communication.

Respectfully submitted,

REISING, ETHINGTON, BARNES, KISSELLE, P.C.

/Michael C. Adams/

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Michael C. Adams  
Registration No. 56,041  
P.O. Box 4390  
Troy, Michigan 48099  
(248) 689-3500